

10/655 974

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,817,716 B1
DATED : November 16, 2004
INVENTOR(S) : Stephen P. Hines

Page 1 of 23


It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The title page, showing the illustrative figure should be deleted and substitute therefor, the attached title page.

Delete drawing sheets 1-21 and substitute therefor, the drawing sheets 1-21 as shown on the attached pages.

Signed and Sealed this

Twenty-ninth Day of March, 2005

A handwritten signature in black ink, appearing to read "Jon W. I. Dudas". The signature is stylized with a large, looped initial "J" and a distinct "I" before the last name.

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Hines

(10) **Patent No.:** **US 6,817,716 B1**
(45) **Date of Patent:** **Nov. 16, 2004**

(54) **AERIAL-IMAGE DISPLAY SYSTEMS**

(76) **Inventor:** **Stephen P. Hines, 4525-B San Fernando Rd., Glendale, CA (US) 91204**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** **10/655,974**

(22) **Filed:** **Sep. 5, 2003**

Related U.S. Application Data

(63) Continuation of application No. 09/687,618, filed on Oct. 13, 2000, now abandoned.
(60) Provisional application No. 60/159,223, filed on Oct. 13, 1999.

(51) **Int. Cl.⁷** **G03B 21/00; G03B 21/26; G02B 27/14**

(52) **U.S. Cl.** **353/10; 353/7; 353/28; 359/631**

(58) **Field of Search** **353/10, 7, 28; 359/629-631**

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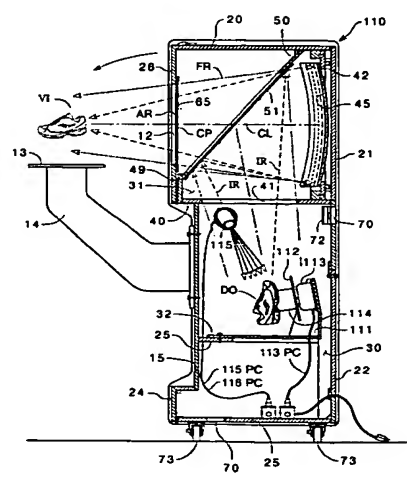
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Assistant Examiner—Magda Cruz
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(57) **ABSTRACT**

Apparatus for producing aerial-images is disclosed employing a combination of focusing reflectors, beamsplitter polarizing filters, and light sources. An object to be displayed is illuminated, and its image partially reflected by the beamsplitter to a focusing mirror and reflected to an aerial position. A polarizer prevents ambient light or images from degrading or interfering with the aerial-image. A clock radio, personal television display counter, as well as animated mannequin versions are disclosed.

14 Claims, 21 Drawing Sheets



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U.S. Patent

Nov. 16, 2004

Sheet 1 of 21

6,817,716 B1

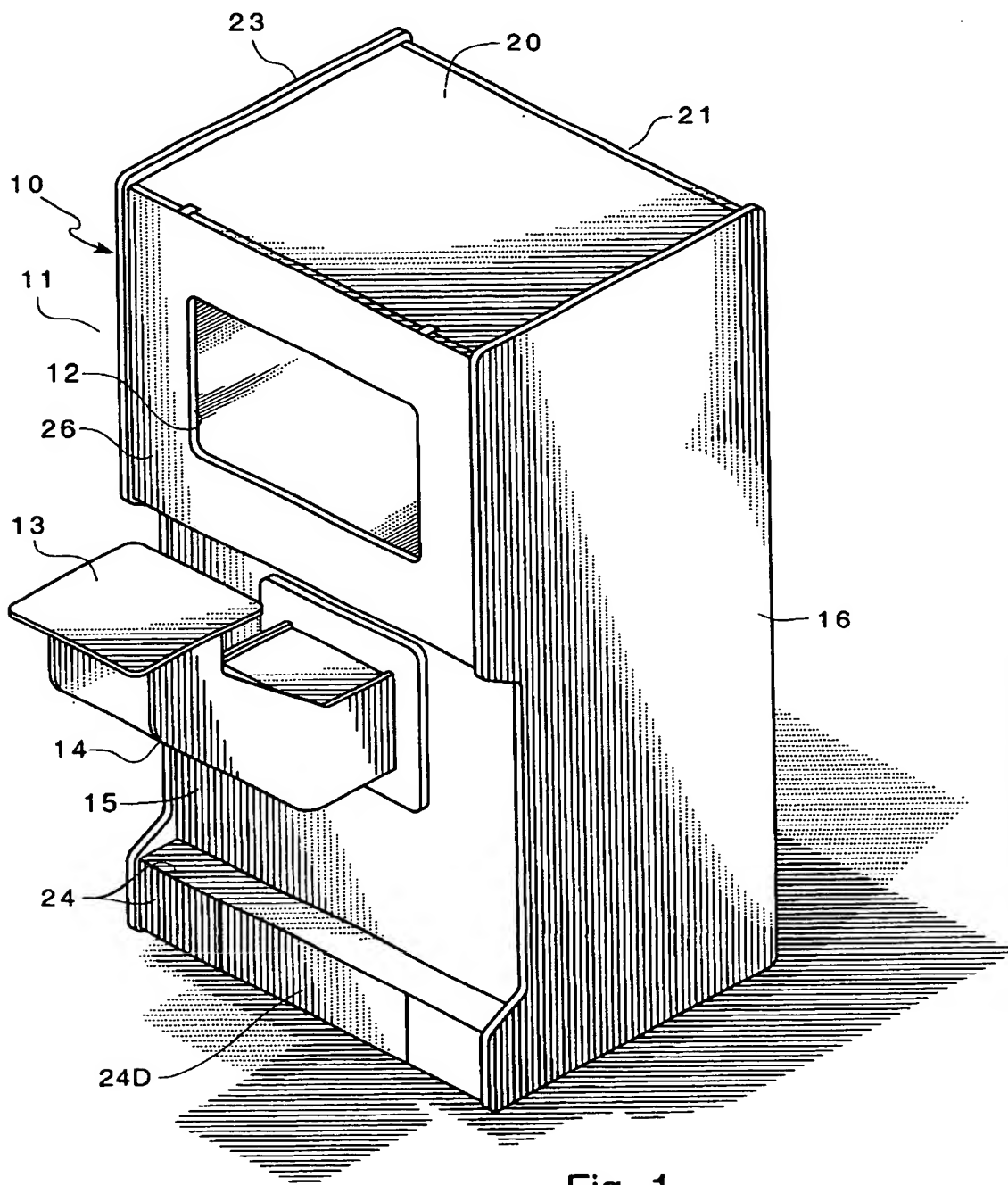


Fig. 1

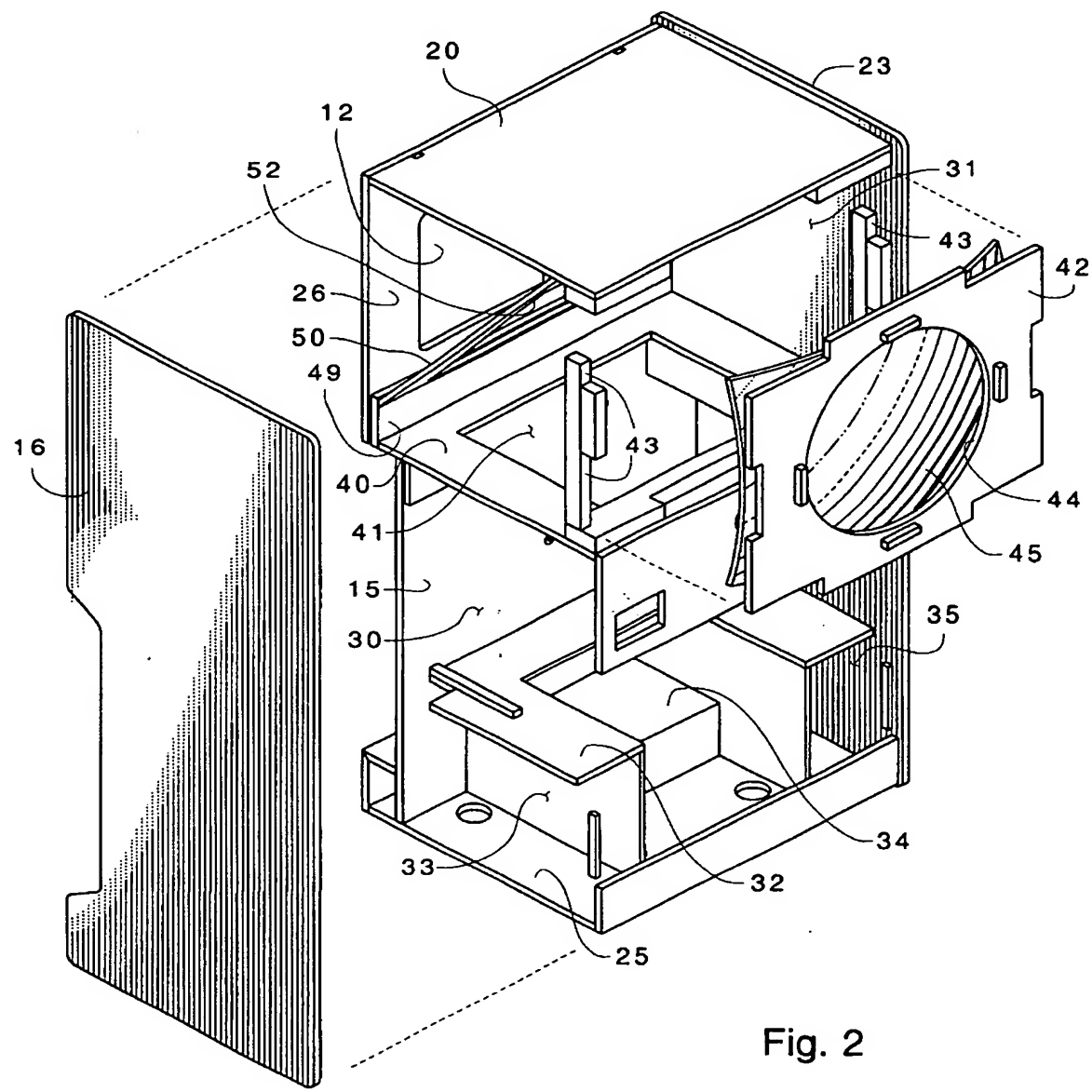
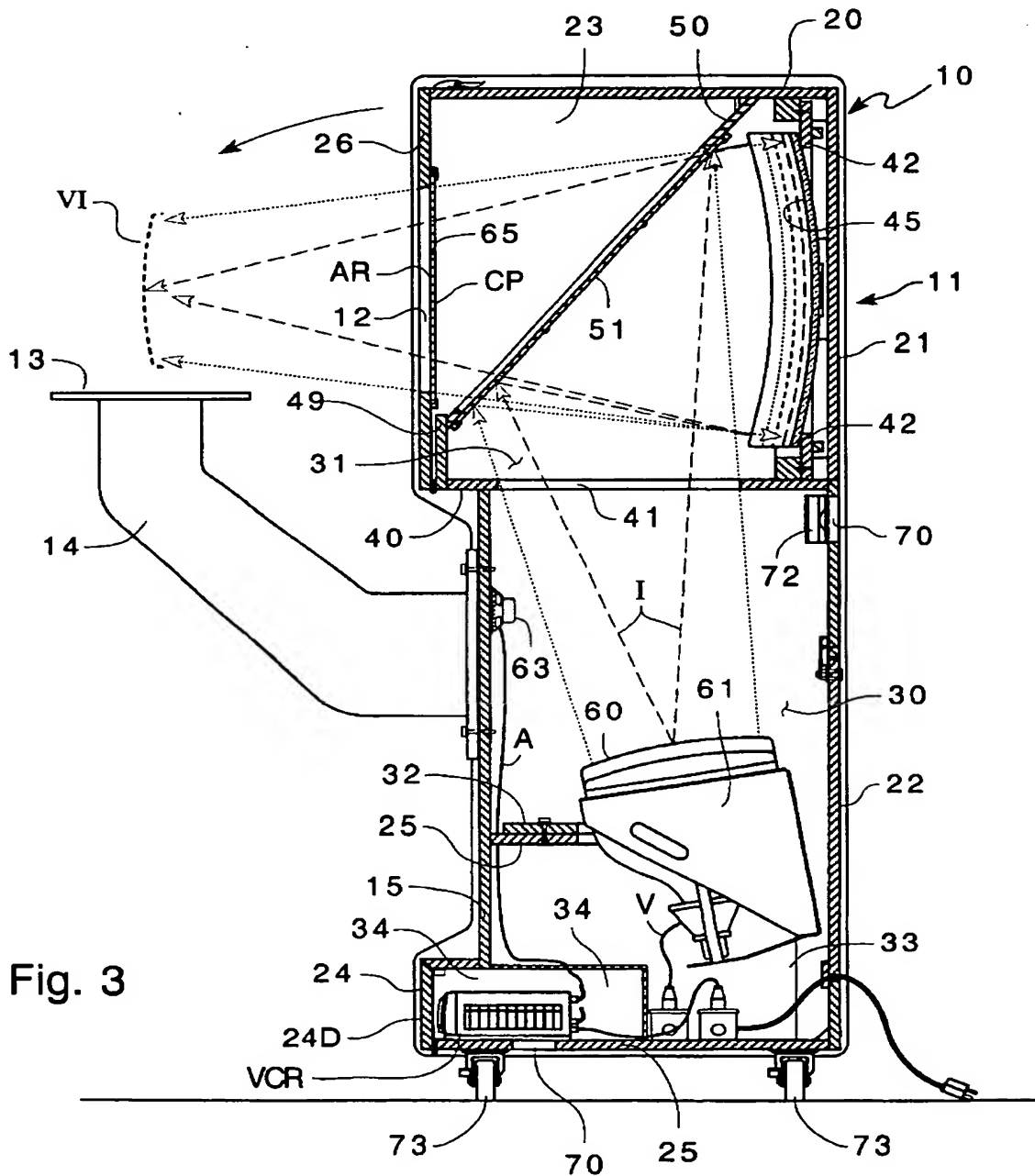


Fig. 2

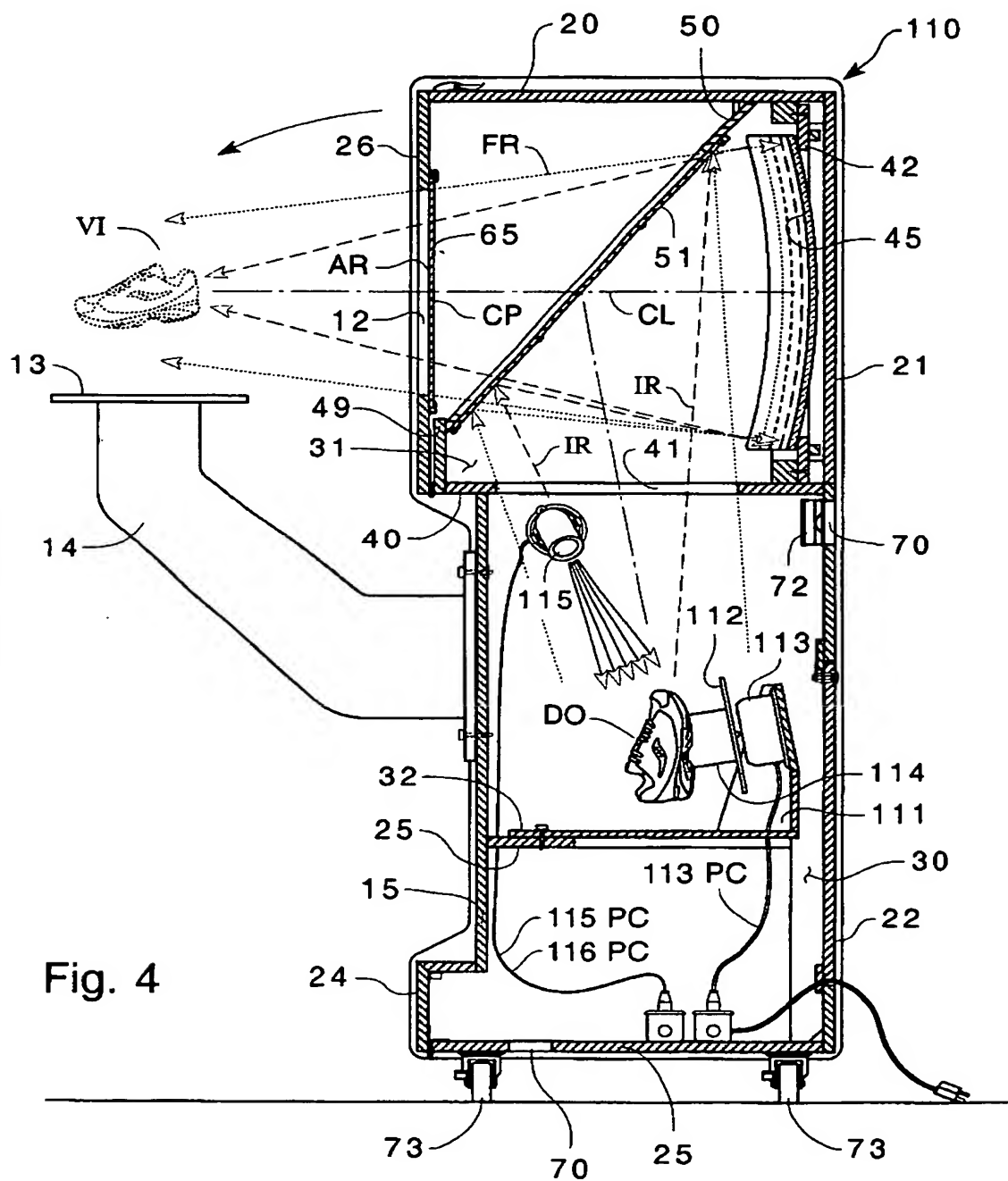


U.S. Patent

Nov. 16, 2004

Sheet 4 of 21

6,817,716 B1



U.S. Patent

Nov. 16, 2004

Sheet 6 of 21

6,817,716 B1

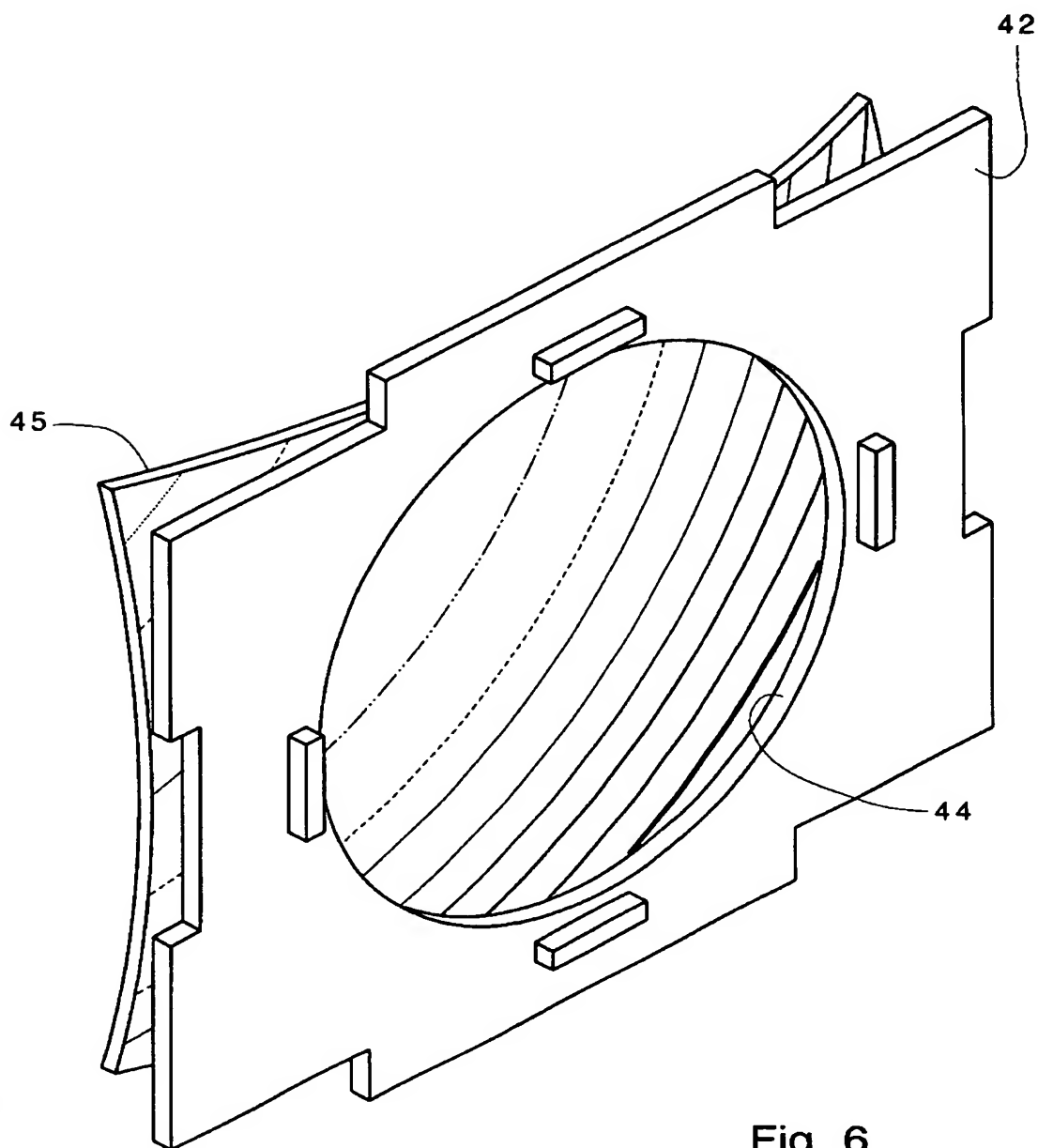


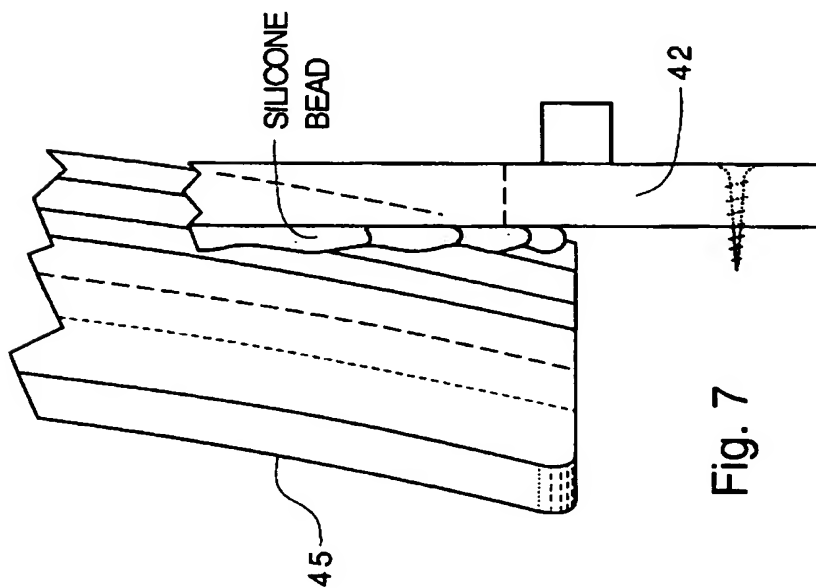
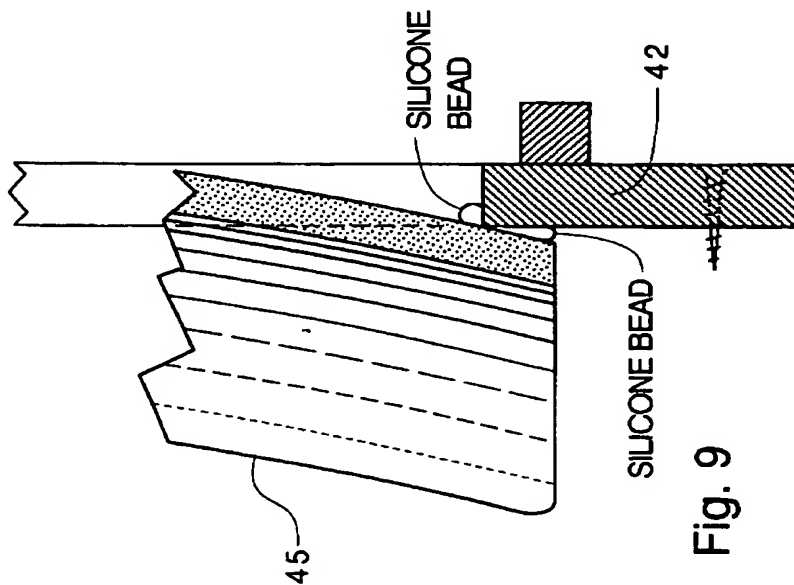
Fig. 6

U.S. Patent

Nov. 16, 2004

Sheet 7 of 21

6,817,716 B1



U.S. Patent

Nov. 16, 2004

Sheet 8 of 21

6,817,716 B1

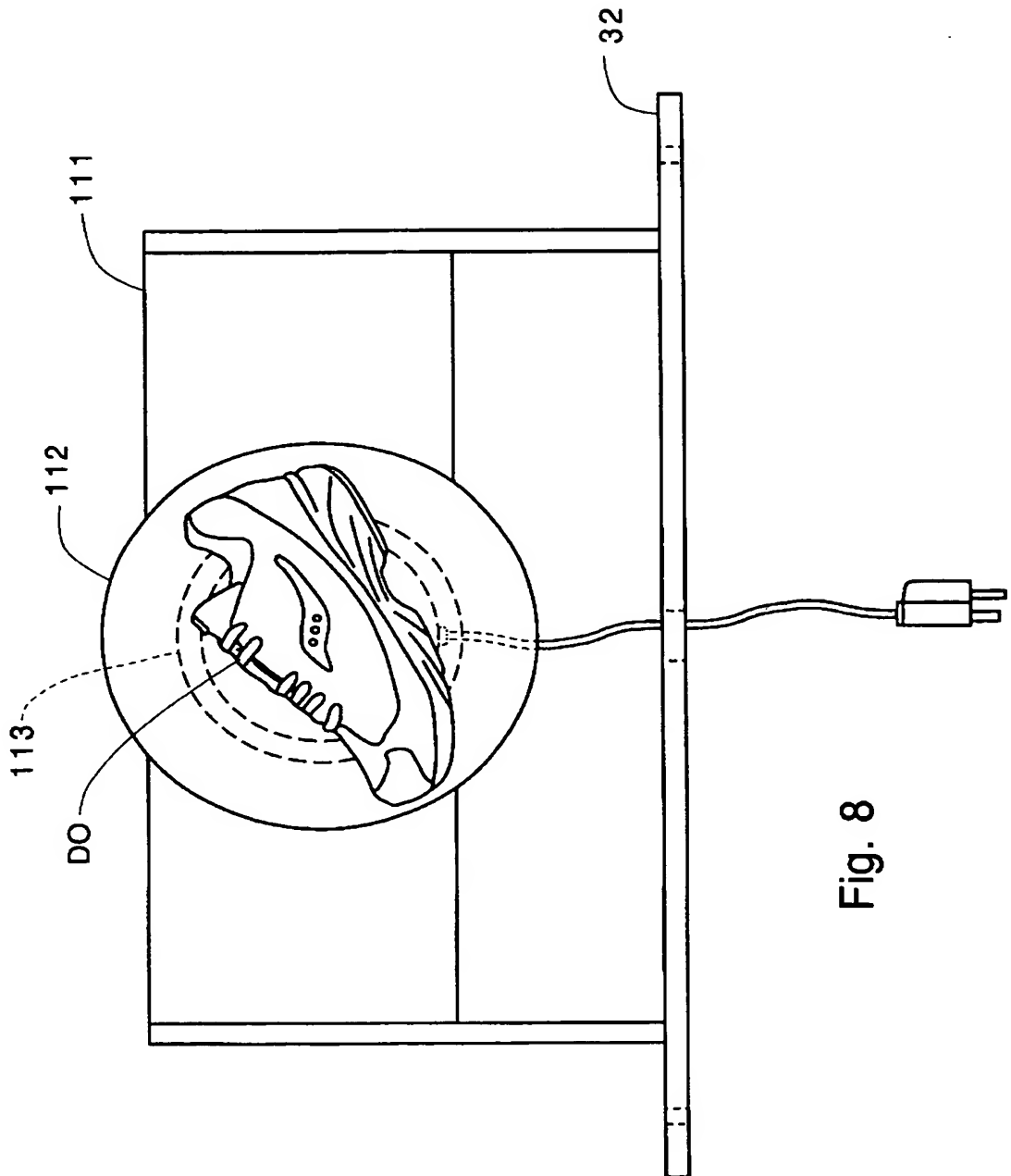


Fig. 8

U.S. Patent

Nov. 16, 2004

Sheet 9 of 21

6,817,716 B1

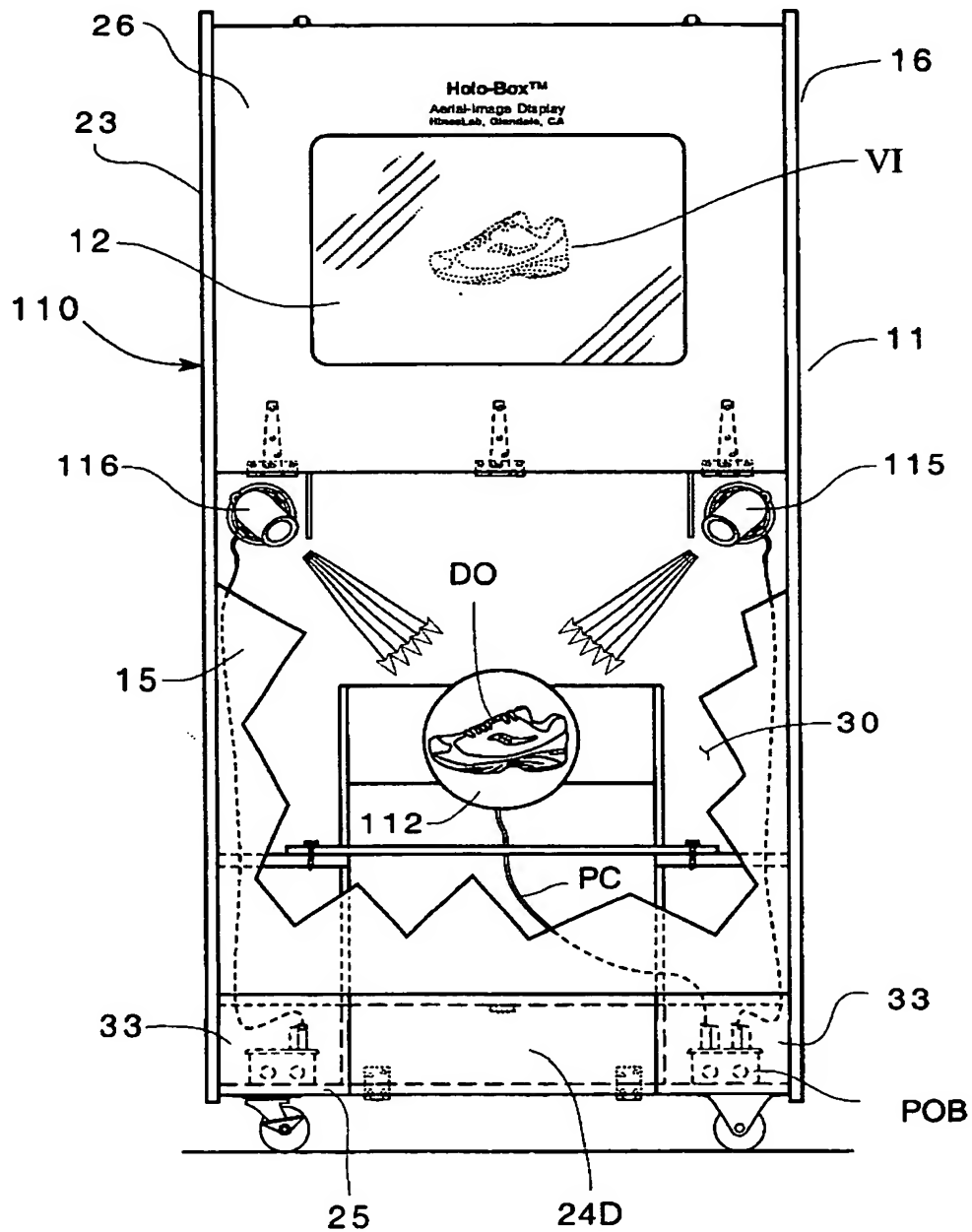


Fig. 10

U.S. Patent

Nov. 16, 2004

Sheet 10 of 21

6,817,716 B1

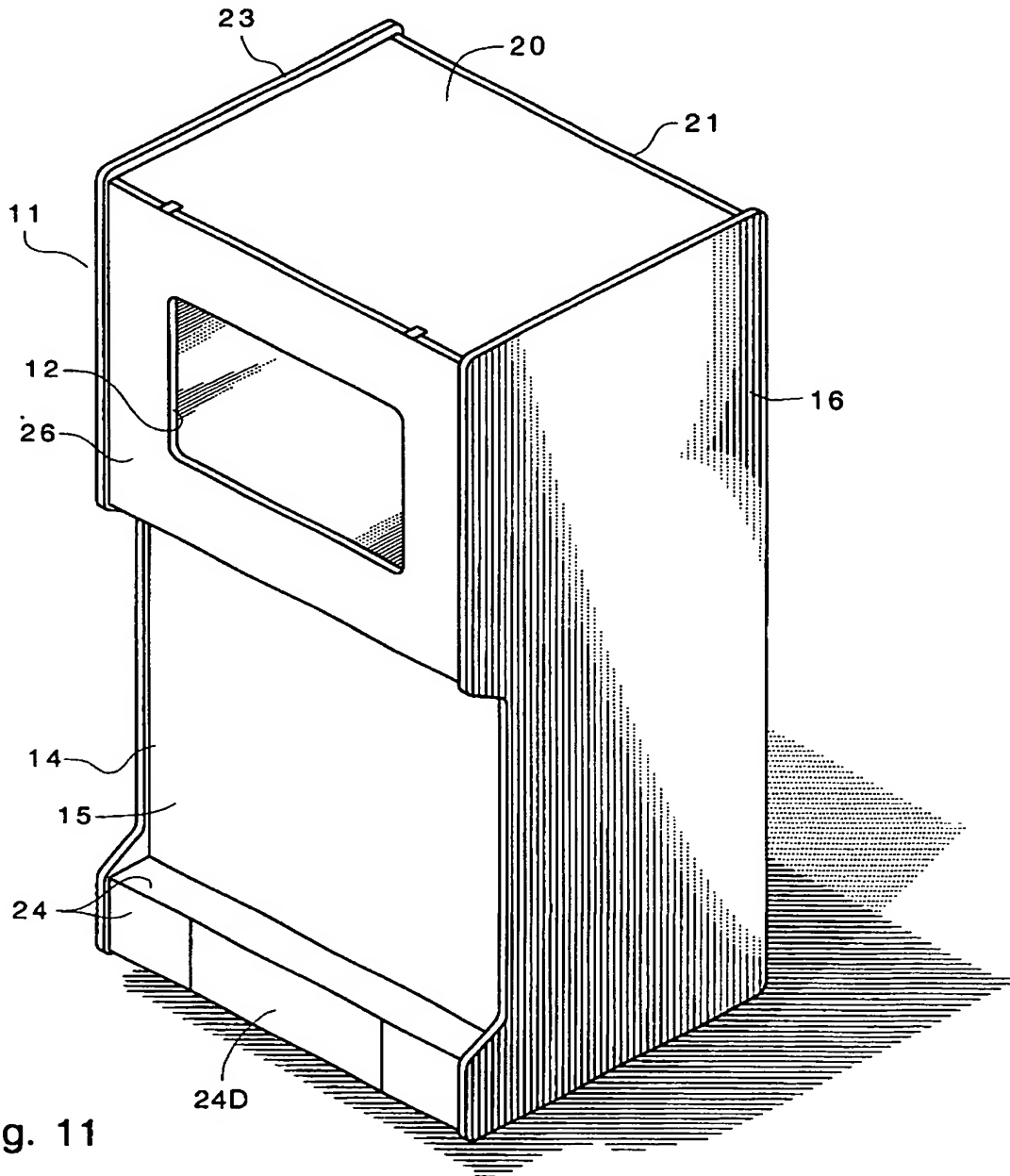


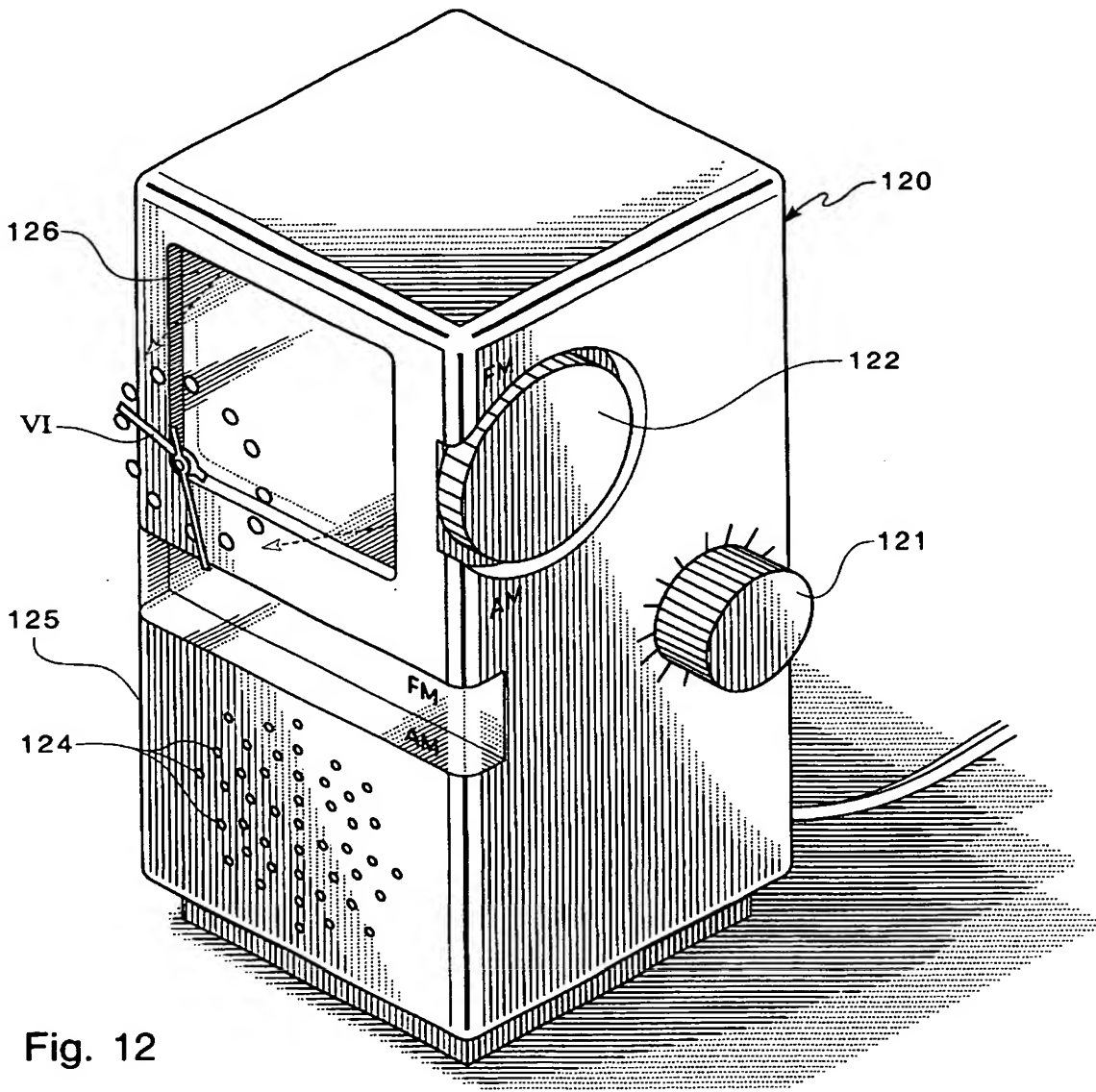
Fig. 11

U.S. Patent

Nov. 16, 2004

Sheet 11 of 21

6,817,716 B1



U.S. Patent

Nov. 16, 2004

Sheet 12 of 21

6,817,716 B1

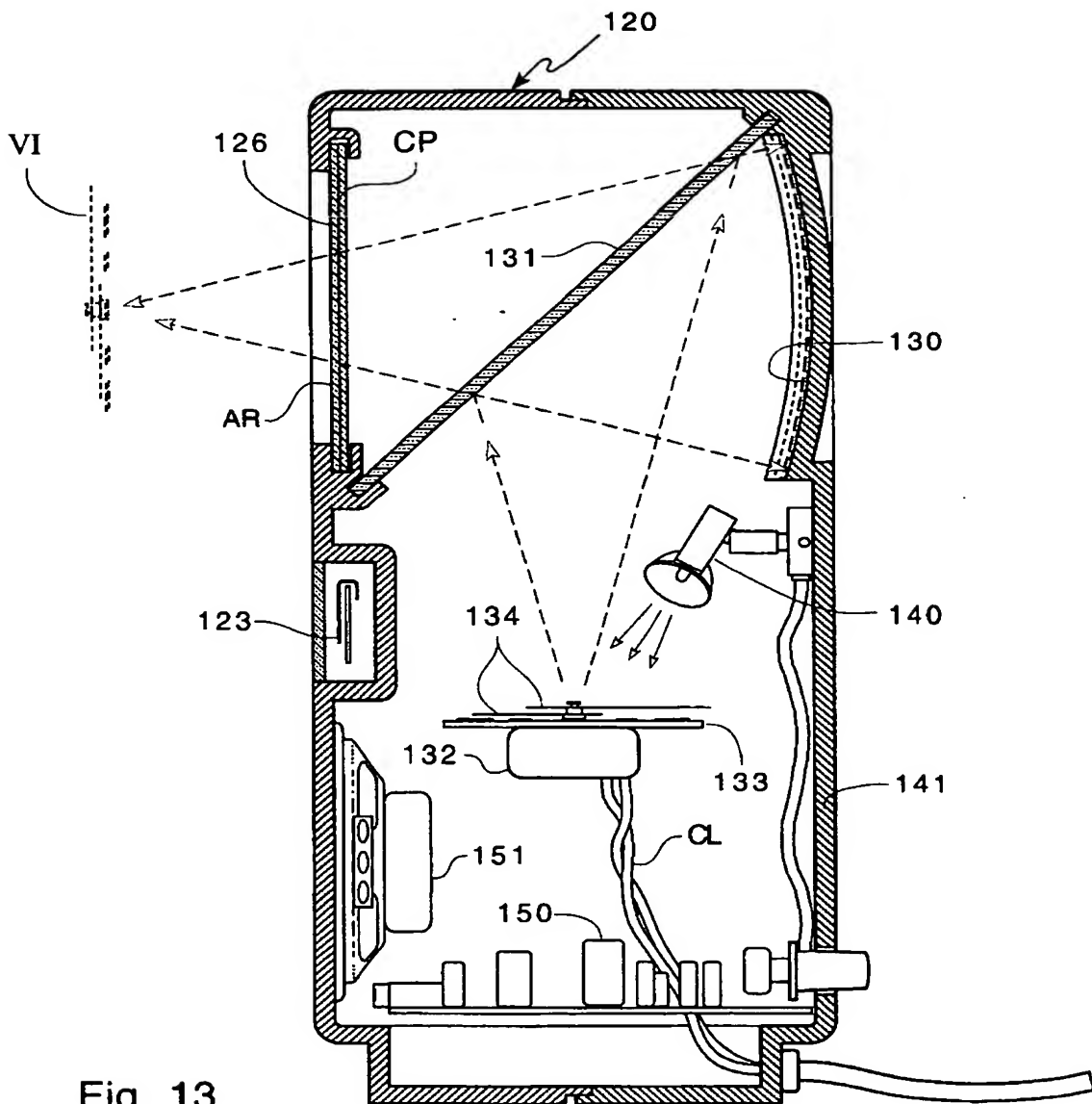


Fig. 13

U.S. Patent

Nov. 16, 2004

Sheet 13 of 21

6,817,716 B1

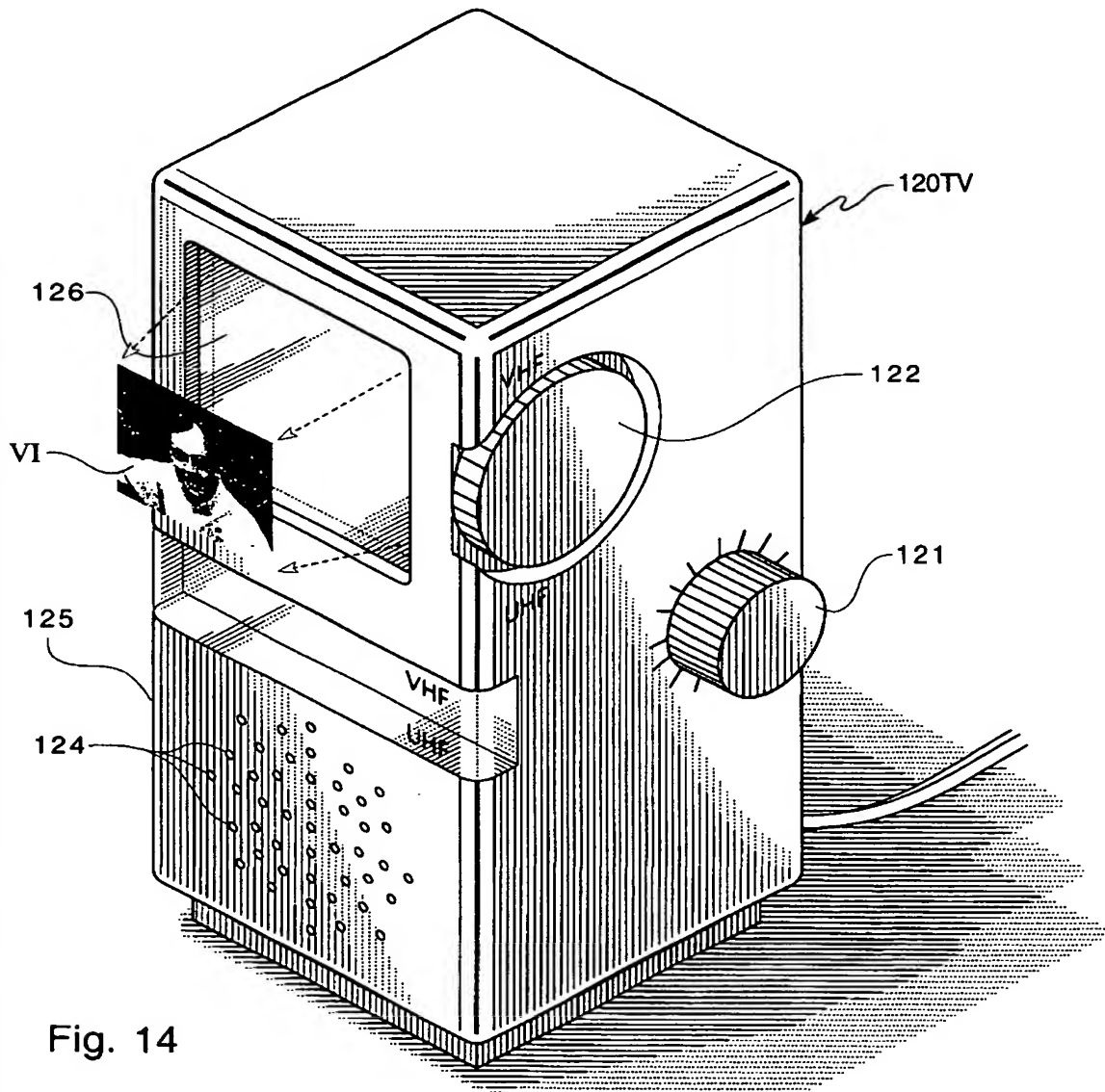


Fig. 14

U.S. Patent

Nov. 16, 2004

Sheet 14 of 21

6,817,716 B1

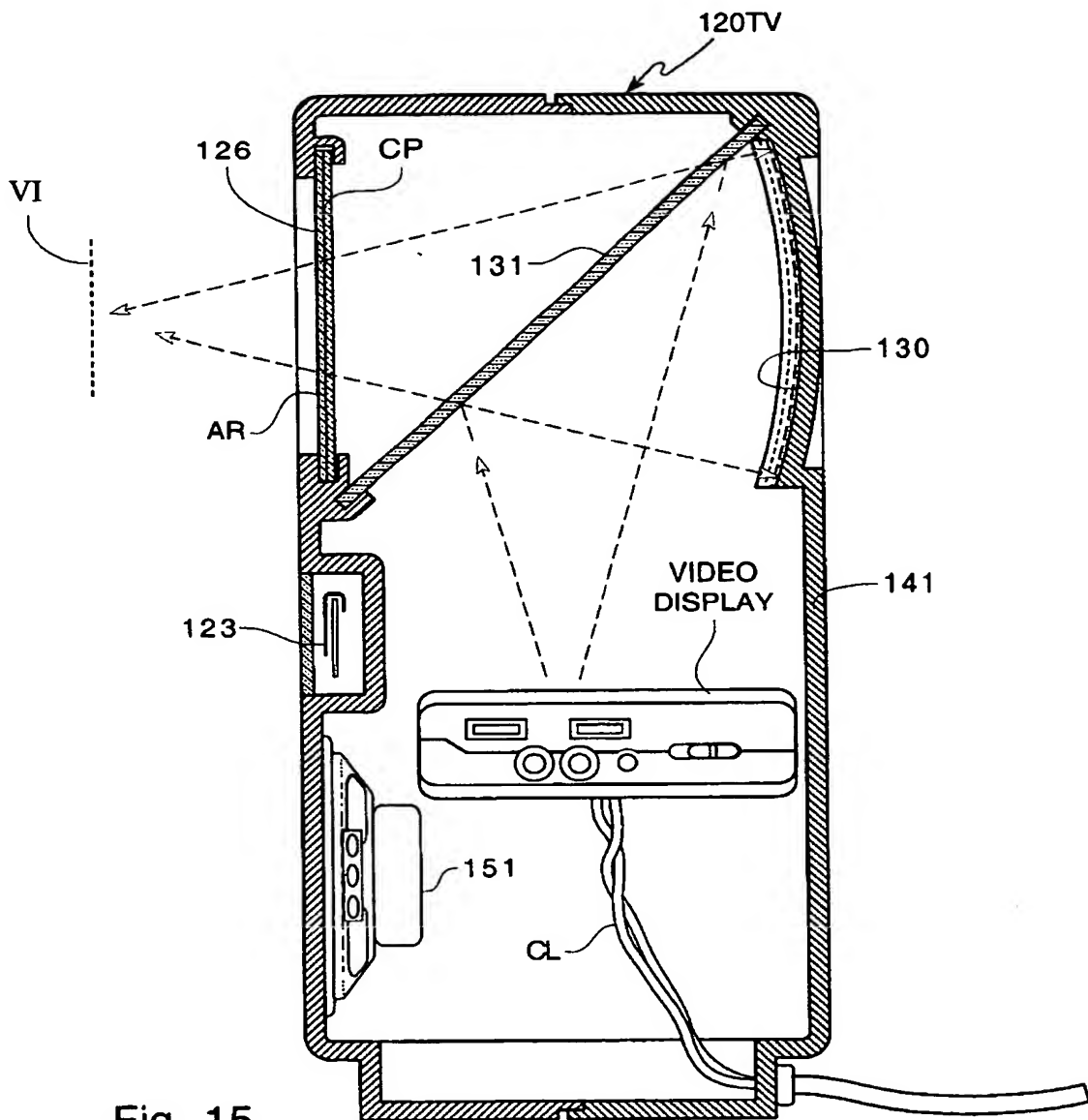


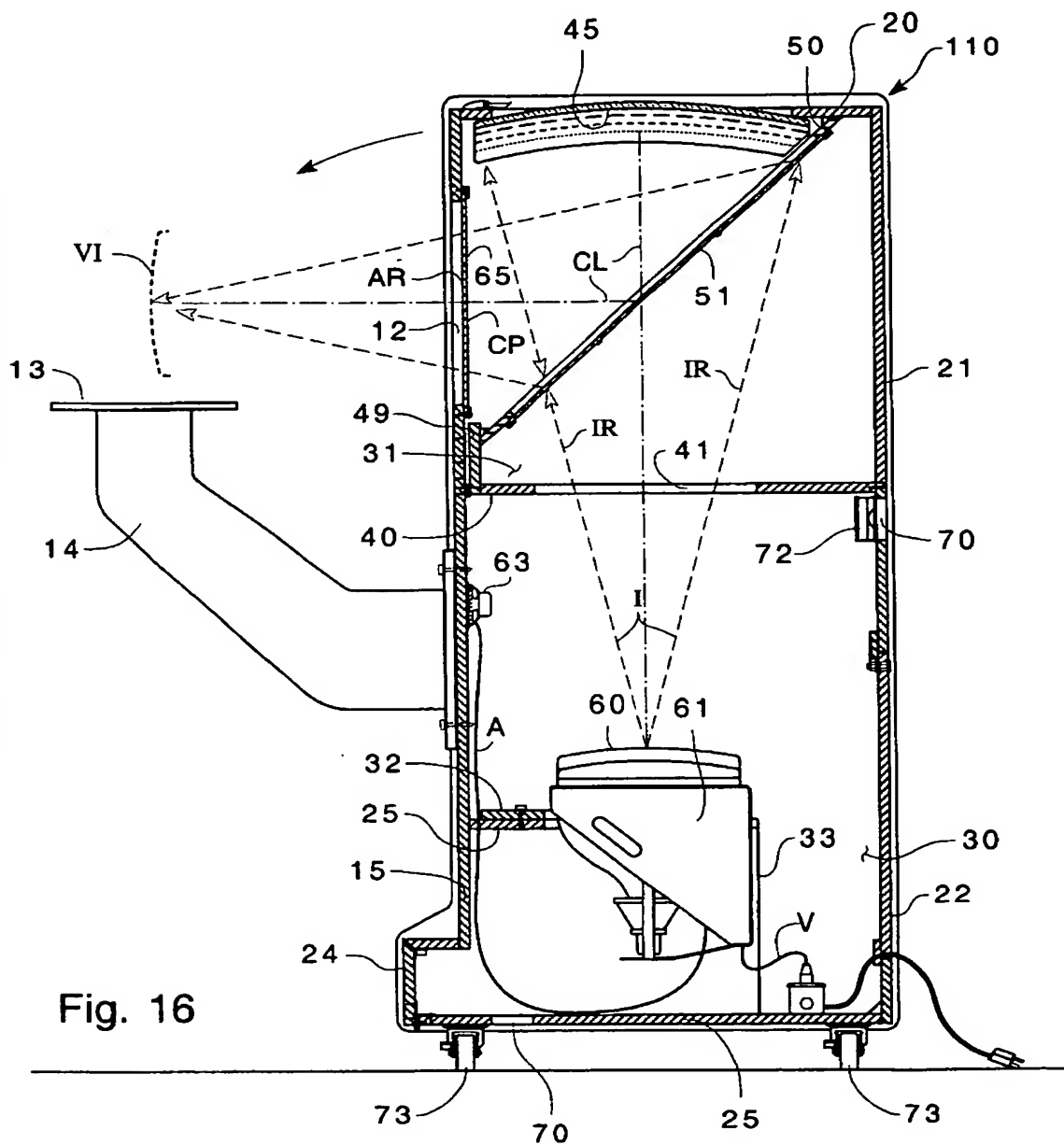
Fig. 15

U.S. Patent

Nov. 16, 2004

Sheet 15 of 21

6,817,716 B1

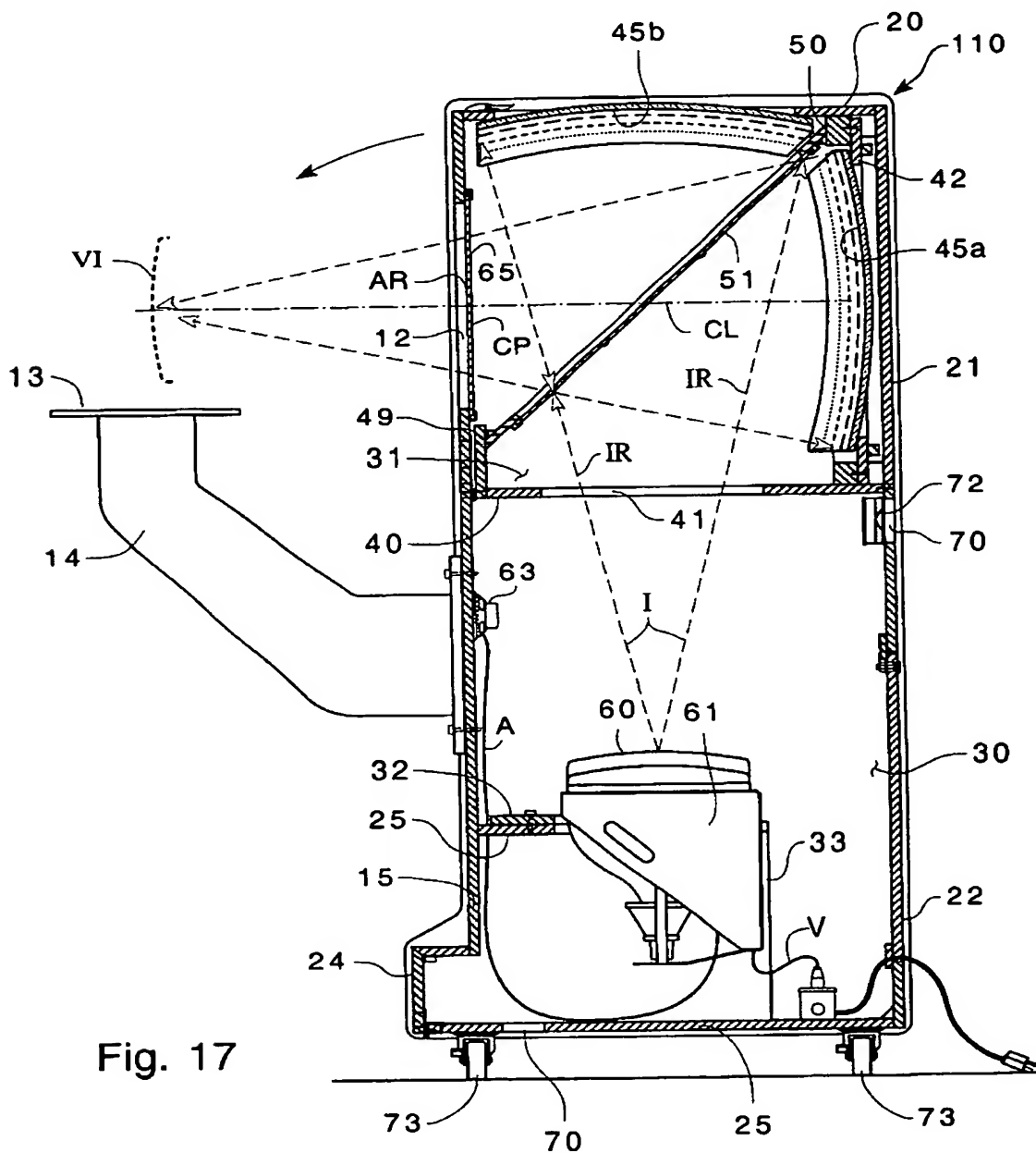


U.S. Patent

Nov. 16, 2004

Sheet 16 of 21

6,817,716 B1

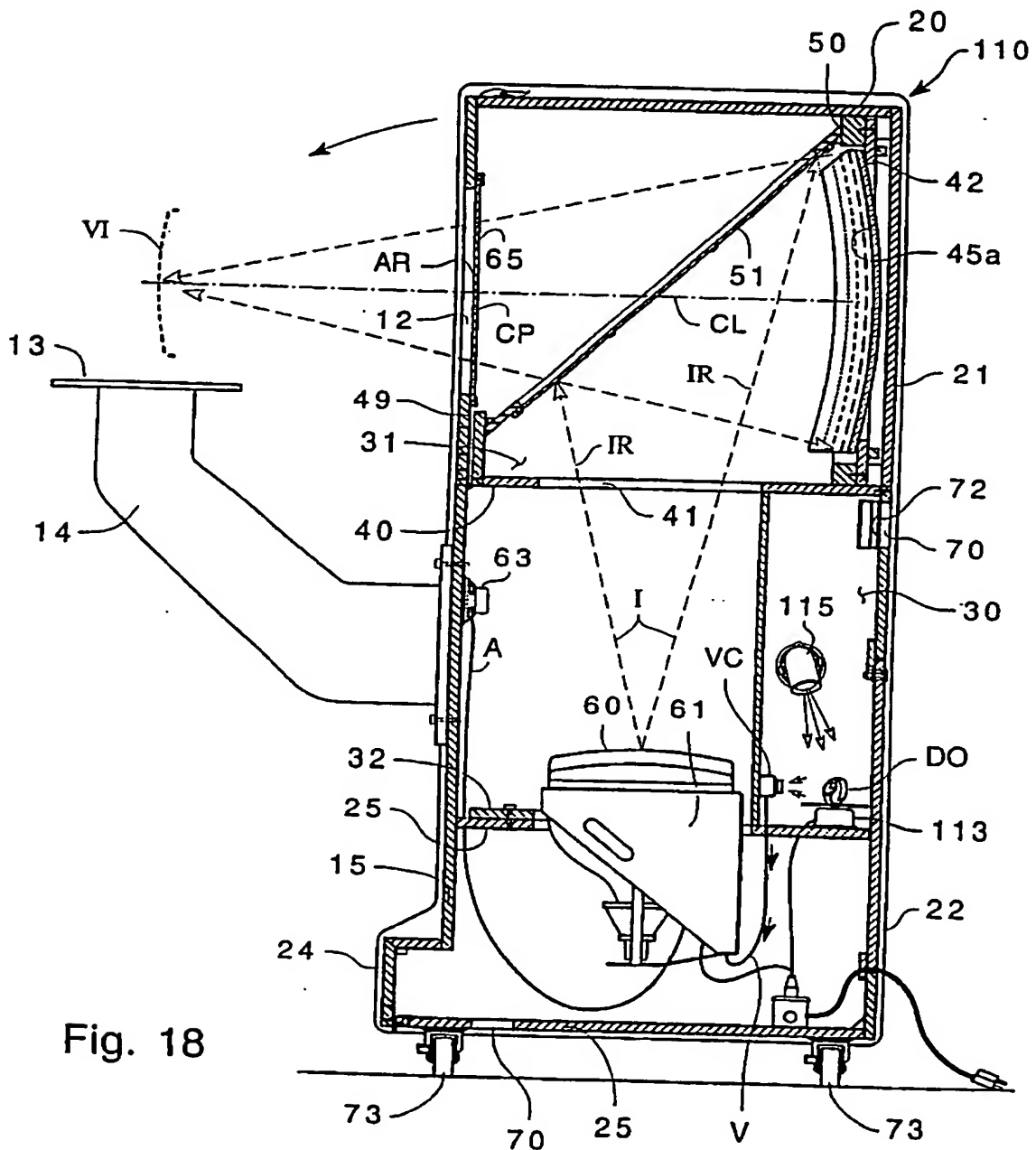


U.S. Patent

Nov. 16, 2004

Sheet 17 of 21

6,817,716 B1



U.S. Patent

Nov. 16, 2004

Sheet 18 of 21

6,817,716 B1

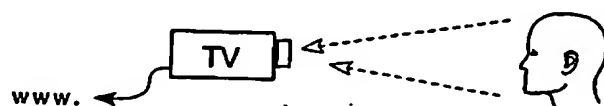


Fig. 19A

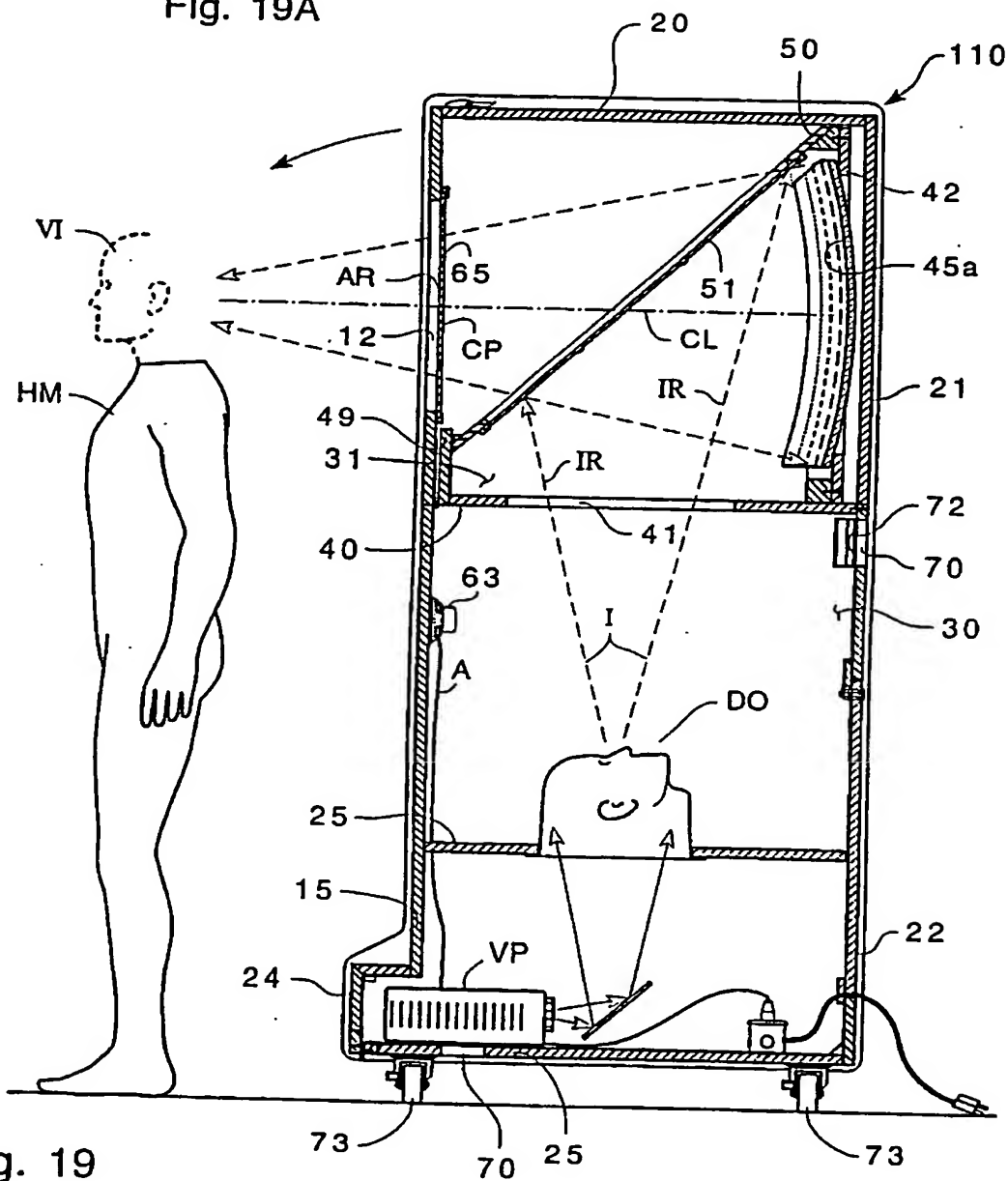


Fig. 19

U.S. Patent

Nov. 16, 2004

Sheet 19 of 21

6,817,716 B1

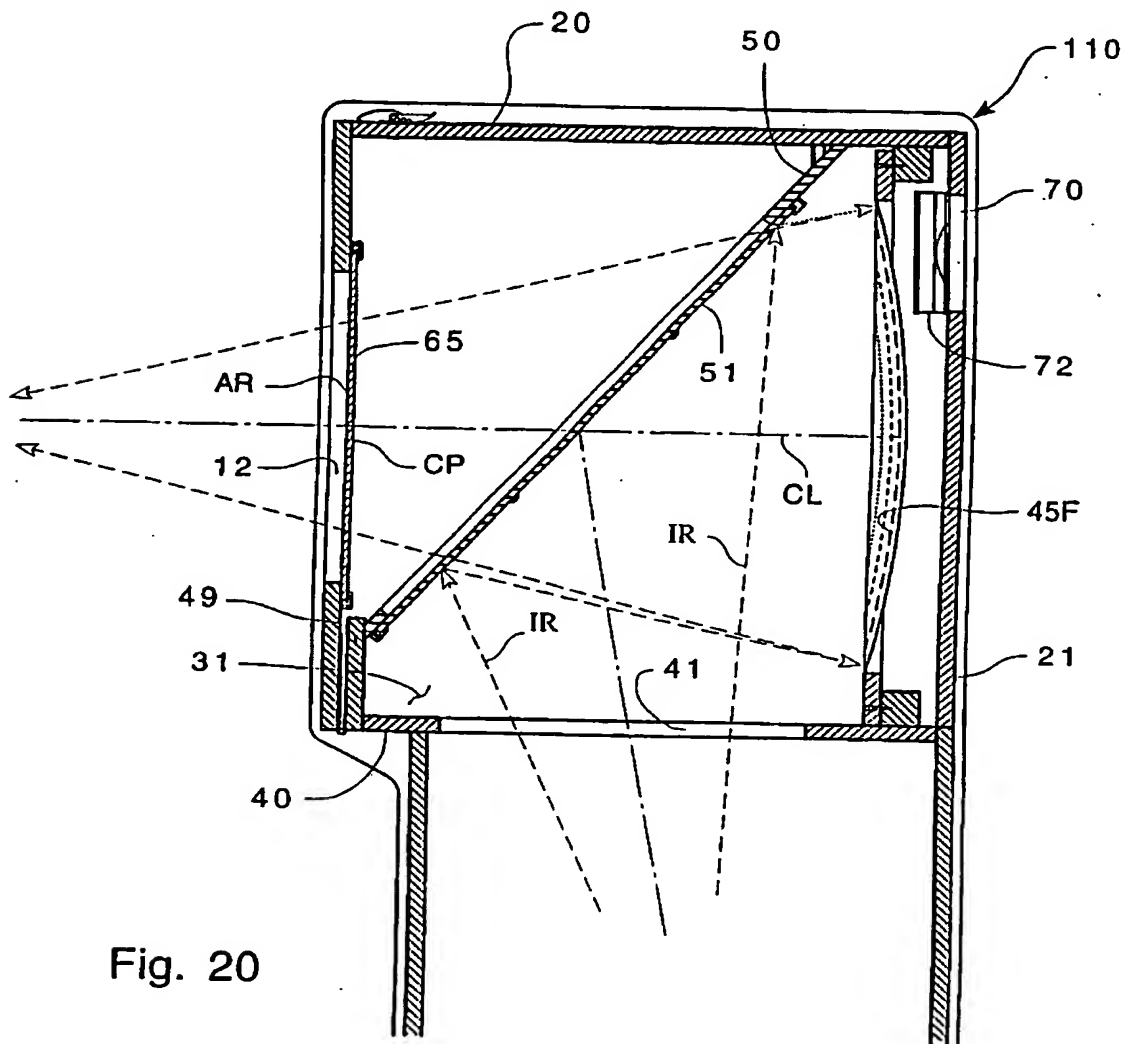


Fig. 20

U.S. Patent

Nov. 16, 2004

Sheet 20 of 21

6,817,716 B1

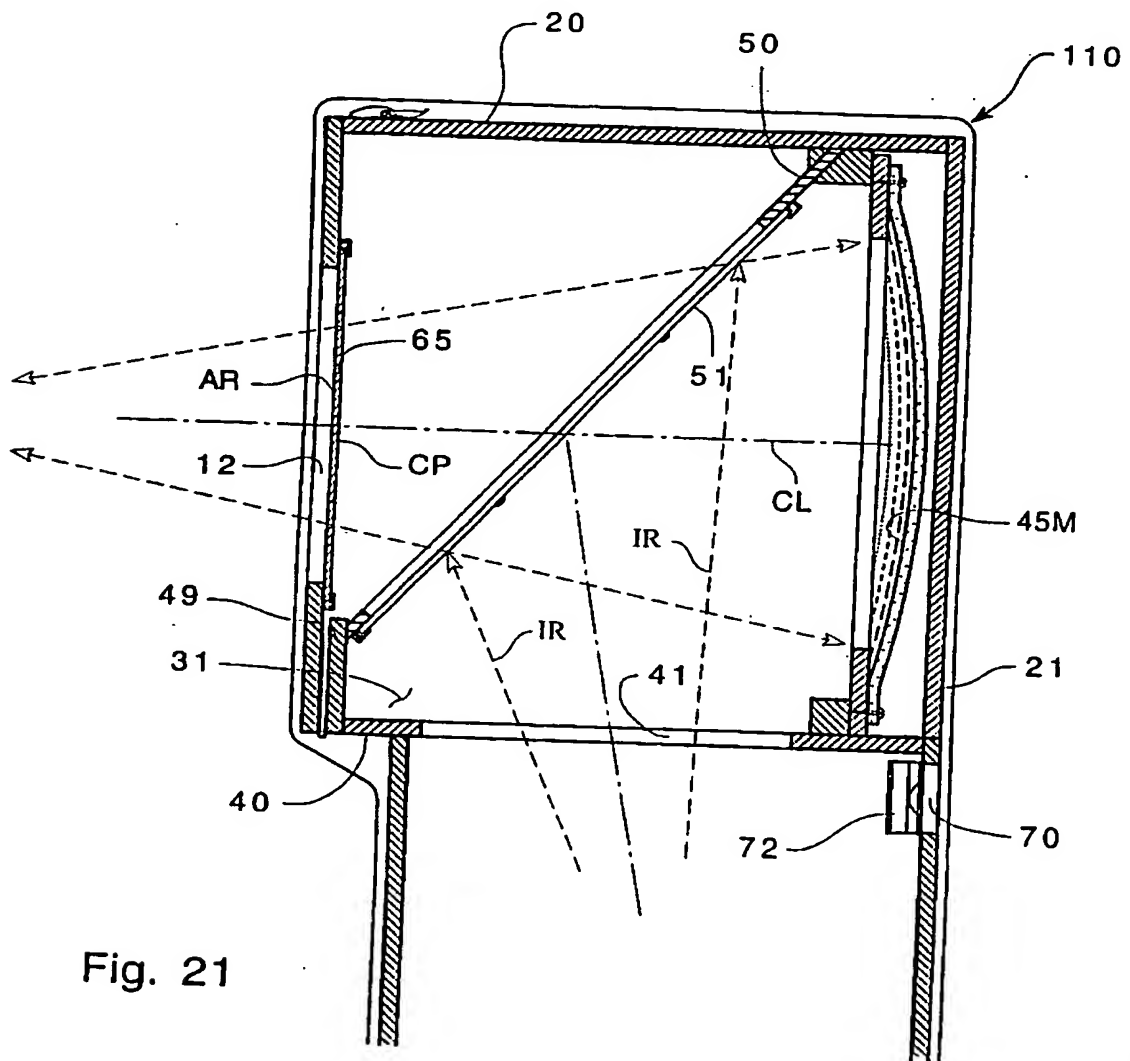


Fig. 21

U.S. Patent

Nov. 16, 2004

Sheet 21 of 21

6,817,716 B1

